Bird Egg TRVs, ATLs, and SLVs EGG TRVs from Hoffman et al. 1998

FI = Foc =

BMFs taken from Henny at al 2003 and are spefici for each indi Egg TRVs taken (specific to each species) from EPA 2003 or or A Standard value of 4 was used for each PCB to represent the Results for Sediment Screening Value (SLV) listed in µg/kg dry

PCB 126

KESTREL

| | | | Willamette River Osprey BMF study |
|----------|-------------|-------------|-----------------------------------|
| | Kestrel Egg | Kestrel Egg | |
| | Individual | Population | Whole Body Fish |
| | TRV | TRV | to Osprey Egg |
| Chemical | (mg/kg) | (mg/kg) | |
| PCB 126 | 0.0023 | 0.023 | 15 |

CHICKEN

| | | | Willamette River Osprey BMF study |
|----------|-------------|-------------|-----------------------------------|
| | chicken Egg | chicken Egg | |
| | Individual | Population | Whole Body Fish |
| | TRV | TRV | to Osprey Egg |
| Chemical | (mg/kg) | (mg/kg) | |
| PCB 126 | 0.0003 | 0.001 | 15 |

COMMON TERN

| COMINION LEKIN | | | |
|----------------|-----------------|---------------|-----------------------------|
| | | | Willamette River Osprey BMF |
| | | | study |
| | common tern Egg | ommon tern Eg | g |
| | Individual | Population | Whole Body Fish |
| | TRV | TRV | to Osprey Egg |
| Chemical | (mg/kg) | (mg/kg) | |

PCB 77

Bird Egg TRVs, ATLs, and SLVs

KESTREL

| | | | Willamette River Osprey BMF study |
|----------|-------------|-------------|-----------------------------------|
| | Kestrel Egg | Kestrel Egg | |
| | Individual | Population | Whole Body Fish |
| | TRV | TRV | to Osprey Egg |
| Chemical | (mg/kg) | (mg/kg) | |
| PCB 77 | 0.02 | 0.1 | 3.3 |

CHICKEN

| | | | Willamette River Osprey BMF study |
|----------|-------------|-------------|-----------------------------------|
| | chicken Egg | chicken Egg | |
| | Individual | Population | Whole Body Fish |
| | TRV | TRV | to Osprey Egg |
| Chemical | (mg/kg) | (mg/kg) | |
| PCB 77 | 0.005 | 0.01 | 3.3 |

MALLARD

| | | Willamette River |
|-------------|-------------|-------------------------|
| | | Osprey BMF |
| | | study |
| Mallard Egg | Mallard Egg | |
| | Mallard Egg | Mallard Egg Mallard Egg |

| | Individual | Population | Whole Body Fish |
|----------|------------|------------|-----------------|
| | TRV | TRV | to Osprey Egg |
| Chemical | (mg/kg) | (mg/kg) | |
| PCB 77 | 5 | 25 | 3.3 |

ividual PCB (Henny, C.J., J.L. Kaiser, R.A. Grove, V.R. Bentley, and J.E. Ellio riginal study cited in field comments (U.S. Environmental Protection Agency BSAF.

/ weight.

| Δ | TL OR PROTECTION LI | | | | |
|---|---------------------|------------------|---------------|---------------|------|
| | | | | | |
| | In PPM wet wt | In PPM wet wt | In PPB wet wt | In PPB wet wt | |
| | Kestrel | Kestrel | Kestrel | Kestrel | |
| | Individual | Population | Individual | Population | BSAF |
| | ATL (TRV/BMF) in | ATL (TRV/BMF) ir | ATL | ATL | |
| | mg/kg | mg/kg | (μg/kg) | (µg/kg) | |
| | 0.0002 | 0.0015 | 0.15 | 1.53 | 4 |

| ATL OR PROTE | | | | | |
|--------------|--------|------------------|---------------|---------------|------|
| | | | | | |
| In PPM we | et wt | In PPM wet wt | In PPB wet wt | In PPB wet wt | |
| chicker | า | chicken | chicken | chicken | |
| Individu | al | Population | Individual | Population | BSAF |
| ATL (TRV/B | MF) in | ATL (TRV/BMF) ir | ATL | ATL | |
| mg/kg | | mg/kg | (μg/kg) | (µg/kg) | |
| 0.0000 |)2 | 0.00007 | 0.020 | 0.067 | 4 |

| ATL OR PROTECTION L | | | | |
|---------------------|------------------|---------------|---------------|------|
| | | | | |
| | | | | |
| In PPM wet wt | In PPM wet wt | In PPB wet wt | In PPB wet wt | |
| common tern | common tern | common tern | common tern | |
| Individual | Population | Individual | Population | BSAF |
| ATL (TRV/BMF) in | ATL (TRV/BMF) ir | ATL | ATL | |
| mg/kg | mg/kg | (μg/kg) | (µg/kg) | |

| 0.001 | 0.003 | 1 | 3 | 4 |
|-------|-------|---|---|---|
| | | | | |

| / | ATL OR PROTECTION LI | | | | |
|---|----------------------|------------------|---------------|---------------|------|
| | | | | | |
| | In PPM wet wt | In PPM wet wt | In PPB wet wt | In PPB wet wt | |
| | Kestrel | Kestrel | Kestrel | Kestrel | |
| | Individual | Population | Individual | Population | BSAF |
| | ATL (TRV/BMF) in | ATL (TRV/BMF) ir | ATL | ATL | |
| | mg/kg | mg/kg | (μg/kg) | (µg/kg) | |
| | 0.01 | 0.03 | 6 | 30 | 4 |

| ATL OR PROTECTION LEVEL FOR PREY ITEMS | | | | |
|----------------------------------------|------------------|---------------|---------------|------|
| | | | | |
| In PPM wet wt | In PPM wet wt | In PPB wet wt | In PPB wet wt | |
| chicken | chicken | chicken | chicken | |
| Individual | Population | Individual | Population | BSAF |
| ATL (TRV/BMF) in | ATL (TRV/BMF) ir | ATL | ATL | |
| mg/kg | mg/kg | (μg/kg) | (µg/kg) | |
| 0.00 | 0.00 | 2 | 3 | 4 |

| I | ATL OR PROTECTION LEVEL FOR PREY ITEMS | | | | | |
|---------------|----------------------------------------|--|--------------------|--|--|--|
| | | | | | | |
| In PPM wet wt | | | | | | |
| ı | 111 1 1 111 110 110 | | 111 1 1 2 1100 111 | | | |

| Individual | Population | Individual | Population | BSAF |
|------------------|------------------|------------|------------|------|
| ATL (TRV/BMF) in | ATL (TRV/BMF) ir | ATL | ATL | |
| mg/kg | mg/kg | (μg/kg) | (µg/kg) | |
| 1.52 | 7.58 | 1515 | 7576 | 4 |

tt. 2003. Biomagnification factors (fish to osprey eggs from Willamette R y. 2003. Analyses of laboratory and field studies of reproductive toxicity i

| EGG |
|----------------|
| Kestrel Egg |
| Population SLV |
| (ppb) dry wt |
| |
| |
| |
| |
| 0.04 |
| |

| EGG | EGG |
|----------------|----------------|
| chicken Egg | chicken Egg |
| Individual SLV | Population SLV |
| (ppb) dry wt | (ppb) dry wt |
| | |
| | |
| | |
| | |
| 0.001 | 0.002 |
| 0.001 | 0.002 |

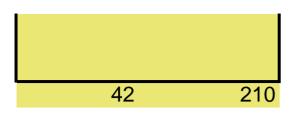
| EGG | EGG |
|----------------|----------------|
| Kestrel Egg | Kestrel Egg |
| Individual SLV | Population SLV |
| (ppb) dry wt | (ppb) dry wt |

0.016 0.081

| EGG | EGG |
|----------------|----------------|
| Kestrel Egg | Kestrel Egg |
| Individual SLV | Population SLV |
| (ppb) dry wt | (ppb) dry wt |
| | |
| | |
| | |
| | |
| 0.17 | 0.84 |

| EGG | EGG |
|----------------|----------------|
| chicken Egg | chicken Egg |
| Individual SLV | Population SLV |
| (ppb) dry wt | (ppb) dry wt |
| | |
| | |
| | |
| | |
| 0.04 | 0.00 |
| 0.04 | 0.08 |

| EGG | EGG |
|----------------|----------------|
| Mallard Egg | Mallard Egg |
| Individual SLV | Population SLV |
| (ppb) dry wt | (ppb) dry wt |
| | |



liver, Oregon, U.S.A.) for PCDDs, PCDFs, PCBs and OC pesticides. Environn n birds exposed to dioxin-like compounds for use in ecological risk assessi

nental Monitoring and Assessment 84:275-315.)□ ment. U.S. Environmental Protection Agency, Office of Research and □

| Development, | National Cente | r for Environ | mental Assess | ment, Cincinn |
|--------------|----------------|---------------|---------------|---------------|
| | | | | |
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ıati, OH EPA/600/R-03/114F, 51 pp.□